

Bog Turtle Project Review Fact Sheet  
Hudson/Housatonic Recovery Unit  
New York Field Office  
February 2006

The following fact sheet is intended to provide information to assist with the review of projects which occur within the likely range of the bog turtle (*Clemmys muhlenbergii*) (within the Hudson/Housatonic Recovery Unit) within State of New York. The bog turtle is Federally-listed as threatened and State-listed as an endangered species.

Bog turtles prefer open canopy wetlands with soft, saturated soils such as fens or sedge meadows fed by seeps and springs of cold groundwater that has been in contact with calcium-rich bedrock or soils. In New York, bog turtles are very often found in or near rivulets having deep mucky substrate, but where above-surface water depths are very shallow – usually only a few inches deep at most. Plant species commonly associated with bog turtle habitats include tamarack (*Larix laricina*), cinquefoil (*Potentilla* spp.), alders (*Alnus* spp.), willows (*Salix* spp.), sedges (*Carex* spp.), sphagnum moss (*Sphagnum* sp.), jewelweed (*Impatiens capensis*), rice cut-grass (*Leersia oryzoides*), tearthumb (*Polygonum sagittatum*), arrow arum (*Peltandra virginica*), red maple (*Acer rubrum*), skunk cabbage (*Symplocarpus foetidus*), rushes (*Juncus* spp.), and bulrushes (*Scirpus* spp.).

The U.S. Fish and Wildlife Service (Service) recommends that an evaluation be completed of any existing wetland habitat that would be disturbed, directly or indirectly, by the project, and its potential to support the bog turtle (Phase 1 survey). Information on surveys can be found at <http://www.fws.gov/northeast/nyfo/es/btsurvey.pdf>.

The Service and New York State Department of Environmental Conservation (NYSDEC) should be sent a copy of the Phase 1 survey results for review and comment including a USGS topographic map indicating location of site; project design map, including location of wetlands and streams; color photographs of the site; surveyors name; date of visit; opinion on potential/not potential habitat; description of the hydrology, soils, and vegetation.

If the Phase 1 survey identifies any wetlands with potentially suitable habitat, an evaluation is needed to determine whether the proposed project will completely avoid all direct and indirect effects to the wetlands, in consultation with the Service and the NYSDEC. Information to assist with the evaluation of potential impacts on bog turtles can be found in Appendix A - Bog Turtle Conservation Zones of the Bog Turtle (*Clemmys muhlenbergii*) Northern Population Recovery Plan (U.S. Fish and Wildlife Service 2001) which can be found at <http://www.fws.gov/northeast/nyfo/es/btconszone.pdf>. If impacts cannot be avoided, a Phase 2 survey should be completed. The purpose of the Phase 2 survey is to determine the likely presence of bog turtles at the site in potentially suitable habitat. Please see detailed instructions regarding survey protocols at <http://www.fws.gov/northeast/nyfo/es/btsurvey.pdf>. Also, please contact this office before conducting any Phase 2 surveys.

Please note that the New York Field Office is currently developing a list of surveyors whom we have determined are capable of conducting both Phase 1 and Phase 2 surveys in New York. You can contact our office for a copy of the list in spring 2006.

The project's environmental documents should identify project activities that might result in adverse impacts to the bog turtle or their habitat. Information on any potential impacts and the results of any recommended habitat analyses or surveys for the bog turtle should be provided to this office and they will be used to evaluate potential impacts to the bog turtle or their habitat, and to determine the need for further coordination or consultation pursuant to the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

#### References:

U.S. Fish and Wildlife Service. 2001. Bog Turtle (*Clemmys muhlenbergii*), Northern Population, Recovery Plan. Hadley, Massachusetts. 103 pp.